

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (currently amended) an intelligent sport device system for measurement of a swing, comprising:

a shaft;

a removable electronic components unit, wherein the electronic components unit is inserted into and resides solely with the shaft and wherein the electronic components unit gathers swing or stroke dynamics, the electronic components unit comprising:

a plurality of accelerometers capable of producing linear acceleration measurements of a sports device in three (3) axes during the swing or stroke of the sports device;

a plurality of gyroscopes capable of producing angular rate measurements of the sports device in three (3) axes during the swing or stroke of the sports device; and

an RF transmitter for transmitting the linear acceleration measurements and the angular rate measurements; and

logic coupled to the RF link box for transforming the linear acceleration measurements and the angular rate measurements into swing information corresponding to the swing of the sport device; and a display for displaying the swing information.

2. (original) The intelligent sport device system of claim 1, wherein the shaft is the shaft of a golf club.

3. (original) The intelligent sport club system of claim 1, wherein the shaft is a joystick of a video game controller.

4. (original) The intelligent sport device system of claim 1, wherein the shaft is the shaft of a racket.

5. (original) The intelligent sport device system of claim 1, wherein the shaft is the shaft of a bat.

6. (original) The intelligent sport device of claim 5, wherein the electronic components are mounted on a board such that the board and the original shaft and reinserted into a second shaft for producing and transmitting linear acceleration and angular rate measurements corresponding to the second shaft.

7. (original) The intelligent sport device of claim 6, wherein the electronic components further comprise logic for determining whether the board and electronic components are inserted into the original shaft or the second shaft.

8. (original) The intelligent sport device of claim 1, further comprising logic for marking the swing as a reference swing.

9. (original) The intelligent sport device of claim 1, further comprising: logic for transmitting the linear acceleration measurements and the angular rate measurements to a remote location; and logic for receiving and displaying instruction from the remote location based upon the transmitted linear acceleration and angular rate measurements.

10. (currently amended) A method of sport instruction, comprising the steps of:
inserting an electronic components unit into a shaft of a sports device;
generating, by the electronic components unit, linear acceleration measurements of the sports device in three (3) axes during a swing of the sport device;

generating, by the electronic components unit residing solely within the shaft of the sports device, angular rate measurements of the sports device in three (3) axes during the swing of the sport device;

transmitting the linear acceleration measurements and the angular rate measurements to an RF link box via a wireless connection;

transforming the linear acceleration measurements and the angular rate measurements into swing information corresponding to the swing of the sport device; and displaying the swing information.

11. (original) The method of sport instruction of claim 10, wherein the shaft is the shaft of a golf club.

12. (original) The method of sport instruction of claim 10, wherein the shaft is the shaft of a racket.

13. (original) The method of sport instruction of claim 12, wherein the racket is a tennis racket.

14. (previously amended) The method of sport instruction of claim 10, wherein the electronic components are mounted on a board such that the board and the electronic components may be removed from the shaft and reinserted into a second shaft for producing and transmitting linear acceleration and angular rate measurements corresponding to a swing of the second shaft.

15. (original) The method of sport instruction of claim 14, further comprising the steps of: determining whether the board and electronic components are inserted into the original shaft or the second shaft; and transmitting information concerning whether the electronic components are inserted into the original shaft or the second shaft to the RF link box.

16. (original) The method of sport instruction of claim 10, further comprising the steps of: designating the swing a swing of interest.

17. (original) The method of sport instruction of claim 10, further comprising the steps of: transmitting the linear acceleration measurements and the angular rate measurements to a remote location; receiving instruction information from the remote location based upon the transmitted linear acceleration and angular rate measurements; and displaying the instruction information.

18. (currently amended) An intelligent golf club for measurement and display of a swing, comprising:

a removable electronic components unit, wherein the electronic components unit is inserted into and resides solely with the shaft and wherein the electronic components unit gathers swing or stroke dynamics

a shaft;

[an] a removable electronic components unit, wherein the electronic components unit is inserted into and resides solely with the shaft [configured such that the electronic is inserted into the shaft], the electronic components unit comprising:

a plurality of accelerometers capable of producing linear acceleration measurements of the golf club in three (3) axes during a swing of the golf club;

a plurality of gyroscopes capable of producing angular rate measurements of the golf club in three (3) axes during the swing of the golf club; and

an RF transmitter for transmitting information corresponding to the linear acceleration measurements and the angular rate measurements;

wherein the electronic components is configured to produce minimal impact on the weight, balance and ball impact characteristics of the golf club;

an RF link box for receiving the transmissions of the information corresponding to the linear acceleration measurements and the angular rate measurements from the RF transmitter;

logic coupled to the RF link box for transforming the information corresponding to the linear acceleration measurements and the angular rate measurements into swing information corresponding to the swing of the golf club; and
a display for displaying the swing information.

19. (previously amended) The golf club of claim 18, wherein the electronic components of the electronic components unit are mounted on a board such that the board and the electronic components may be removed from the shaft and reinserted into a second shaft corresponding to a second type of golf club for producing linear acceleration and angular rate measurements corresponding to the second shaft and transmitting information corresponding to the linear acceleration and angular rate measurements.

20. (original) The golf club of claim 19, wherein the electronic components further comprise logic for determining whether the board and electronic components are inserted into the original shaft or the second shaft.

21. (currently amended) The golf club of claim 18, further comprising: logic for transmitting the linear acceleration measurements and the angular rate measurements to a remote location; and logic for receiving and displaying instruction from the remote location based upon the transmitted linear acceleration and angular rate measurements.[5.
(new)]